

REMARKS

In the Office Action dated September 9, 2004, claims 1-6 were examined with the result that all claims were rejected. In response, Applicant presents the following argument. In view of this argument, Applicant respectfully requests reconsideration.

In the Office Action, claims 1-6 were rejected under the judicially created Doctrine of Obviousness Type Double Patenting as being unpatentable over claims 36-41 of DeLuca et al U.S. 5,945,410. The Examiner stated that the '410 reference teaches a genus of compounds that encompass the presently claimed compound, and further teaches that the genus of compounds are useful in the treatment of psoriasis. Accordingly, although the presently claimed compound is not explicitly disclosed in the '410 reference, the Examiner believes it would be obvious to use the presently claimed compound in a method of treating psoriasis in view of the '410 disclosure. Applicant, however, respectfully disagrees for the following reasons.

With regard to the '410 reference, Applicant would like to refer the Examiner to Fig. 2 as well as to the description relating to Fig. 2 found at column 16, lines 22-30. As the Examiner can see from Fig. 2, the data illustrate that the compounds taught in '410 are "extremely potent in inducing differentiation of HL-60 cells to the monocyte." In fact, the mixture of the S and R derivatives of 2-methyl-19-nor-20(S)-1 α ,25-dihydroxyvitamin D₃ had greater cell differentiation activity than 1 α ,25-dihydroxyvitamin D₃. This is clearly indicated in Fig. 2 since the solid line for the 20(S) derivatives is located above the dashed line for 1 α ,25-dihydroxyvitamin D₃. Thus, at the same molar concentration, the 20(S) compounds have greater cell differentiation activity than 1 α ,25-dihydroxyvitamin D₃.

In contrast, the HL-60 cell differentiation data set forth in Figure 2 of the present patent application illustrates that the claimed 20(S)-1 α -hydroxy-2 α -methyl-19-nor-vitamin D₃ has cell differentiation activity which is less than 1 α ,25-dihydroxyvitamin D₃. This is indicated by the fact that the curve plotted for the 20(S) compound claimed herein is located below the curve plotted for 1 α ,25-dihydroxyvitamin D₃. Thus, for the same

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molar concentration, the presently claimed compound has less cell differentiation activity than $1\alpha,25$ -dihydroxyvitamin D_3 .

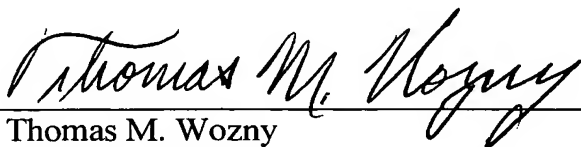
Thus, the prior art data in the '410 reference would predict that the presently claimed compound should have cell differentiation activity that is greater than $1\alpha,25$ -dihydroxyvitamin D_3 . However, as illustrated in Figure 2, the presently claimed $20(S)$ - 1α -hydroxy compound has cell differentiation activity that is less than $1\alpha,25$ -dihydroxyvitamin D_3 . Thus, the prior art predicts high differentiation activity, but in fact, the claimed compound has relatively low differentiation activity, as compared to $1\alpha,25$ -dihydroxyvitamin D_3 .

As a result, Applicant believes that the use of the presently claimed $20(S)$ - 1α -hydroxy compound would not be obvious in view of what is disclosed in the prior art. One skilled in the art would have predicted that the presently claimed compound would have high cell differentiation activity, but instead, it has relatively low cell differentiation activity, as shown by Fig. 2 of the present patent application, and as compared to $1\alpha,25$ -dihydroxyvitamin D_3 . Accordingly, Applicant respectfully requests the withdrawal of the obviousness type double patenting rejection.

An effort has been made to place this application in condition for allowance and such action is earnestly requested.

Respectfully submitted,

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